IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) Method, comprising:

receiving signals from physical communication channels in a mobile communication device ~~within mobile communications equipment~~, said signals including a first signal code and a carrier signal,

~~receiving first signal codes within said physical communication channels,~~

measuring a signal phase of said first signal code ~~within said mobile communications equipment~~,

measuring a frequency shift of said carrier signal ~~within said physical communications channels within said mobile communications equipment~~,

reducing a noise level of said measured signal phase by using said ~~carrier signal~~frequency shift, and

calculating a position of said mobile ~~communications equipment~~communication device using at least said noise level reduced signal phase.

2. (Original) The method of claim 1, wherein said signal phase is a signal code phase.

3. (Currently amended) The method of claim 2, wherein reducing the noise level of the measured signal code phase by using said frequency shift comprises ~~said noise level of said measured signal code phase is reduced by~~ filtering said measured signal code phase with said ~~carrier signal~~frequency shift.

4. (Canceled)

5. (Currently amended) The method of claim [[4]]1, wherein said measured frequency shift is a pseudodoppler frequency.

6. (Currently amended) The method of claim 1, wherein said ~~carrier signal~~frequency shift is obtained from an accumulated carrier phase measurement.

7. (Original) The method of claim 3, wherein said filtering is done by carrier smoothing.

8. (Original) The method of claim 2, wherein a threshold value for estimating said signal code phase is defined.

9. (Currently amended) The method of claim 2, wherein the signal code phase of said first signal code ~~phase~~ is tracked and said ~~carrier signal~~frequency shift is obtained from a carrier and/or phase tracking loop.

10. (Currently amended) The method of claim 1, wherein said ~~carrier signal~~frequency shift is obtained from matched filter outputs within said mobile ~~communications equipment~~communication device.

11. (Original) The method of claim 1, wherein said physical communication channels are transmitted from ground based base stations.

12. (Currently amended) The method of claim 1, wherein said signal phase is transmitted from said mobile ~~communications equipment~~communication device to a base station.

13. (Currently amended) The method of claim 12, wherein said measured frequency shift ~~carrier signal~~ is transmitted from said mobile ~~communications equipment~~communication device to said base station.

14. (Original) The method of claim 1, wherein said position is calculated within an underlying communications network.

15. (Original) The method of claim 1, wherein said position is calculated using a time of arrival calculation principle.

16. (Original) The method of claim 1, wherein said position is calculated using a time difference

of arrival calculation principle.

17. (Currently amended) The method of claim 1, wherein at least position information of ~~said~~ a base station ~~are~~ is transmitted from said base station to said mobile ~~communications equipment~~communication device.

18. (Currently amended) The method of claim 1, wherein said first signal code is a pilot signal code.

19. (Currently amended) The method of claim 1, wherein ~~said~~ a base station and said mobile ~~equipment~~ communication device communicate ~~utilize~~ utilizing a code division multiple access communication protocol.

20. (Original) The method of claim 1, wherein said position is calculated using a hybrid position calculation.

21-29. (Cancelled)

30. (Currently amended) ~~Mobile communications equipment~~A mobile communication device, comprising:

a receiver for receiving communication signals within physical communication channels,

a first signal processor for measuring a signal phase of a first signal code received within said physical communication channels,

a second signal processor for calculating a pseudodoppler frequency from a carrier signal received within said physical communications channels,

a calculation device for calculating a noise level reduced signal phase by using said pseudodoppler frequency, and

a position calculation device for calculating ~~said~~ a position of said mobile communication device using at least said noise level reduced signal phase.

31. (Currently amended) System, comprising:

at least one ~~ground-based~~ base station for providing physical communication channels ~~comprising a first signal code~~, and

at least one mobile ~~communications equipment~~communication device,

wherein said mobile ~~communications equipment~~communication device comprises:

a receiver for receiving communication signals within said physical communication channels,

a first signal processor for measuring a signal phase of a first signal code received within said physical communication channels,

a second signal processor for calculating a frequency shift from a carrier signal received within said physical communications channels, and

a calculation device for calculating a noise level reduced signal phase by using said ~~carrier signal~~frequency shift,

and wherein the system further comprises:

a position calculation device for calculating a position of said mobile communication device using at least said noise level reduced signal phase.

32. (Currently amended) Computer program product, ~~embodied in~~comprising a computer-readable medium storing program codes thereon for use in a mobile communication device, said program codes comprising:~~calculating a position of a mobile communications equipment, operable to cause a processor to~~

instructions for receiving signals from ~~receive~~ physical communication channels within the mobile ~~communications equipment~~communication device, said signals including a first signal code and a carrier signal,

~~receive first signal codes within said physical communication channels,~~

instructions for measuring ~~measure~~ a signal phase of said first signal code ~~within said mobile communications equipment~~,

instructions for measuring ~~measure~~ a frequency shift from the carrier signal received from ~~frequency within~~ said physical communications channels ~~within said mobile communications equipment~~, and

instructions for reducing ~~reduce~~ a noise level of said measured signal phase by using said ~~carrier signal~~ frequency shift.

33. (Currently amended) ~~A~~ The computer program product ~~comprising the computer readable medium~~ of claim 32, wherein the program codes further comprise:

instructions for calculating a position of said mobile communication device using at least said noise level reduced signal phase.

34. (Currently amended) ~~Module~~ A module in communication with a receiver of a mobile communication ~~equipment~~device capable of receiving signals in communication channels, comprising:

a first signal processor for measuring a signal phase of a first signal code received within said physical communication channels,

a second signal processor for calculating a frequency shift from a carrier signal received within said physical communications channels, and

a calculation device for calculating a noise level reduced signal phase by using said ~~carrier signal~~frequency shift.

35. (New) The method of claim 1, wherein the carrier signal is received within a communication channel of the physical communication channels.

36. (New) The method of claim 1, wherein the first signal code is received within a pilot channel of the physical communication channels.

37. (New) The system of claim 31, wherein the first signal processor measures the signal phase of the first signal code received within a pilot channel of the physical communication channels.

38. (New) The system of claim 31, wherein the second signal processor calculates the frequency shift of the carrier signal received within a communication channel of the physical communication channels.

39. (New) The computer program product of claim 32, wherein the first signal code is received within a pilot channel of the physical communication channels.

40. (New) The computer program product of claim 32, wherein the carrier signal is received within a communication channel of the physical communication channels.

41. (New) The module of claim 34, wherein the first signal processor measures a signal phase of the first signal code received within a pilot channel of the physical communication channels.

42. (New) The module of claim 34, wherein the second signal processor calculates the frequency shift of the carrier signal received within a communication channel of the physical communication channels.

43. (New) A mobile communication device, comprising:

means for receiving communication signals in physical communication channels,

means for measuring a signal phase of a first signal code received within said physical communication channels,

means for calculating a frequency shift from a carrier signal received within said physical communications channels, and

means for calculating a noise level reduced signal phase by using said frequency shift, and

means for calculating a position of said mobile communication device using at least said noise reduced signal phase.